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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,675	09/05/2003	Steven Simon	8473-000001	8802
27572	7590	12/01/2005	EXAMINER	
HARNESSE, DICKEY & PIERCE, P.L.C.			TRAN, DALENA	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

3661

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,675

Applicant(s)

SIMON ET AL.

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9, 11-16 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9, 11-16, 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 9/14/05. Claims 2-9, 11-16, and 18-23 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-7, 9, 11-14, 16, and 18-22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunderson et al. (US 2003/0141965 A1), in view of Delcheccolo et al. (6,784,828), and Lutter et al. (US 2003/0212480 A1).

As per claim 2, Gunderson et al. disclose a collision avoidance system for a vehicle, comprising: a warning device (see at least the abstract), and a plurality of sensors that are arranged around the vehicle and that have sensing zones, wherein each of sensors sense objects that are located in respective ones of sensing zones and generate sensor signals that are related to a distance between respective ones of sensors and the objects located in sensing zones (see at least [0040]; [0044] through [0047]; and [0054] through [0057]). Gunderson et al. do not disclose plurality of profiles. However, Delcheccolo et al. disclose each central tracker data processor 30 receive information from each sensors 12-27, and the processor implements a decision determine that it is appropriate to pre-arm the airbag of the vehicle (column 4, lines

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39-63). Also, Delcheccolo et al. disclose field of detection zones or thresholding maybe dynamically controlled based on track information (column 5, lines 4-5), and different zones of sensors provide different ones of the detection zones or thresholds (column 5, lines 35-36). For example, the side object detection zones have wide angular extent, are relatively short in range and must operate over a high range of velocities (column 5, lines 53-55). It is obvious to one of ordinary skill in the art that for the processor to implement a decision determine that it is appropriate to pre-arm the airbag of the vehicle, the limit range of velocities or threshold has to be stored so the processor can compare to the threshold range and to make a decision. Therefore, Delcheccolo et al. inherently disclose memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensors (see at least columns 4-5, lines 45-63), and a vehicle collision avoidance controller that communicates with plurality of sensors and that triggers warning device when sensor signal that is associated with one of plurality of sensors exceeds a respective one of alarm limits in selected profile (see at least columns 6-7, lines 46-40).

Also, to modify for the teach of Gunderson et al. about memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensors, Lutter et al. disclose mission control unit (MCU) process different types of vehicle data, include collision detection sensor (CDS) (see [0018]). MCU records different threshold G forces recorded by the CDS (see [0024]). MCU determines the kinematic state for any external objects within a particular range of vehicle (see [0029]), automatic steer the vehicle to avoid collision (see [0030]), also, MCU determine G force above threshold (see [0041]). In addition, in related, MCU perform diagnostic, vehicle parameters such as oil pressure, water temperature, brake pads parameters

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profiles stored in memory ([0061] to [0062]). MCU also stored authorized facial images in MCU memory (see [0066], [0069]). Therefore, Lutter et al. also inherently disclose memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensor.

Gunderson et al. do not disclose user selection, and at least one of creation, editing and deletion profiles. However, Lutter et al. disclose a profile selection device that allows user selection one of plurality of profiles from memory (see [0047] to [0061]), and a profile setting module that allows at least one of creation, editing and deletion profiles (see [0021] to [0022]; [0062] to [0063]; and [0068] to [0071]). In addition, Delcheccolo et al. also disclose user selection, and at least one of creation, editing and deletion profiles (see columns 5-6, lines 56-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et al. by combining plurality of profiles to detect proximity limit of obstacles in the path of the vehicle and immediately issue a warning when encounter danger; also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et al. by allowing user selecting one of plurality of profiles from memory, and allows at least one of creation, editing and deletion profiles to modify a threshold limit of sensor signals in order to issue a warning signal depend on the severity level of the accident to protect the vehicle occupant.

As per claim 3, Delcheccolo et al. disclose security module that restrict access to profiles based on a security protocol (see at least columns 5-6, lines 55-33). Also, Lutter et al. disclose security module that restrict access to profiles based on a security protocol (see at least [0063] through [0071]).

As per claim 4, Gunderson et al. disclose at least one of plurality of sensors wirelessly communicates with vehicle collision avoidance controller (see at least [0020] through [0022]; and [0075] through [0077]).

As per claim 5, Gunderson et al. do not disclose a vehicle positioning system. However, Lutter et al. disclose a vehicle positioning system that generates vehicle position signals identifying a position of vehicle relative to a fixed coordinate system (see at least [0029], [0030], [0032], and [0033]), and an automatic profile selection module that receives position signals and that automatically selects one of profile based on position signals (see at least [0023] through [0028]; and [0036] through [0043]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et al., by combining vehicle positioning system to detect vehicle location and issue warning signal.

As per claim 6, Gunderson et al. disclose a configuration module that automatically configures collision avoidance system when sensors are connected to vehicle collision avoidance controller (see at least [0044]).

As per claim 7, Gunderson et al. disclose warning device includes a display that concurrently displays a status of sensors (see at least [0047] through [0049]).

As per claim 9, Gunderson et al. disclose sensors are located at least one of a front of vehicle, on sides of vehicle, a rear of vehicle, on side of a device connected to vehicle, and on a rear of device connected to vehicle (see at least [0010]).

Claim 11 is a combination of claims 1 and 5, therefore, it is reject as the same as above.

Claims 12-13,14, and 16, are the same as claims 2-3,7, and 9, therefore, it is reject as the same as above.

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Claims 18-20, are method claims corresponding to system claims 2-4 above. Therefore, they are rejected for the same rationales set forth as above.

Claims 21-22, are method claims corresponding to system claims 5-6 above. Therefore, they are rejected for the same rationales set forth as above.

4. Claims 8, 15, and 23, are rejected under 35 U.S.C.103(a) as being unpatentable over Gunderson et al. (US 2003/0141965 A1), Delcheccolo et al. (6,784,828), and Lutter et al. (US 2003/0212480 A1) as applied to claims 7, and 18 above, and further in view of Reeves et al. (6,606,027).

As per claim 8, Gunderson et al., Delcheccolo et al., and Lutter et al. do not disclose different visual states. However, Reeves et al. disclose display includes red, green, and blue visual states for each sensors (see at least columns 2-3, lines 36-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Gunderson et al., Delcheccolo et al., and Lutter et al. by combining different visual states display for easily differentiate between impact on different side of the vehicle and to issue an appropriate warning signal.

Claim 15, is the same as claim 8, therefore, it is reject as the same as above.

Claim 23, is method claim corresponding to system claim 8 above. Therefore, it is rejected for the same rationales set forth as above.

Remarks

5. The amendment filed on 9/14/05 has been fully considered but they are not deemed to be persuasive.

Applicant's general argument that Delcheccolo et al. do not disclose generating and storing plurality of profiles. However, Delcheccolo et al. disclose each central tracker data processor 30 receive information from each sensors 12-27, and the processor implements a decision determine that it is appropriate to pre-arm the airbag of the vehicle (column 4, lines 39-63). Also, Delcheccolo et al. disclose field of detection zones or thresholding maybe dynamically controlled based on track information (column 5, lines 4-5), and different zones of sensors provide different ones of the detection zones or thresholds (column 5, lines 35-36). For example, the side object detection zones have wide angular extent, are relatively short in range and must operate over a high range of velocities (column 5, lines 53-55). It is obvious to one of ordinary skill in the art that for the processor to implement a decision determine that it is appropriate to pre-arm the airbag of the vehicle, the limit range of velocities or threshold has to be stored so the processor can compare to the threshold range and to make a decision. Therefore, Delcheccolo et al. inherently disclose memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensors (see at least columns 4-5, lines 45-63), and a vehicle collision avoidance controller that communicates with plurality of sensors and that triggers warning device when sensor signal that is associated with one of plurality of sensors exceeds a respective one of alarm limits in selected profile (see at least columns 6-7, lines 46-40).

Also, to modify for the teach of Gunderson et al. about memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensors, Lutter et al. disclose mission control unit (MCU) process different types of vehicle data, include collision detection sensor (CDS) (see [0018]). MCU records different threshold G forces recorded by the CDS (see

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[0024]). MCU determines the kinematic state for any external objects within a particular range of vehicle (see [0029]), automatic steer the vehicle to avoid collision (see [0030]), also, MCU determine G force above threshold (see [0041]). In addition, in related, MCU perform diagnostic, vehicle parameters such as oil pressure, water temperature, brake pads parameters profiles stored in memory ([0061] to [0062]). MCU also stored authorized facial images in MCU memory (see [0066], [0069]). Therefore, Lutter et al. also inherently disclose memory that stores a plurality of profiles, wherein each of profiles defines at least one alarm limit for each sensor.

6. Examiner maintain all the rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

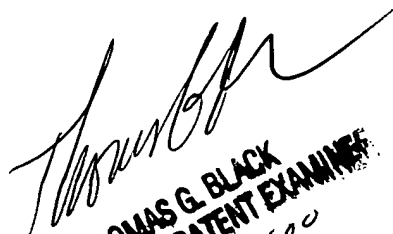
A shorten statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTHS** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 7600

/dt

November 26, 2005